EXECUTIVE SUMMARY

ES.1 Introduction

Southern California Edison (SCE), in its California Public Utilities Commission (CPUC) application (A.15-12-007), filed on December 4, 2015, requests a Permit to Construct (PTC) the Circle City Substation and Mira Loma-Jefferson 66 kilovolt (kV) Subtransmission Line Project (Project) and related components pursuant to CPUC General Order (GO) No. 131-D. SCE's application for a PTC included the Proponent's Environmental Assessment (PEA), which SCE prepared pursuant to Rule 2.4 of the CPUC's Rules of Practice and Procedure.

SCE has identified the electrical needs area (ENA) to be served by the Project as including the northwestern Riverside County area, including the cities of Corona and Norco and the surrounding area of unincorporated Riverside County. The current combined operating capacity of the substations (i.e., the Corona, Jefferson, and Chase substations) that serve the ENA for the proposed Project is 434.6 MVA under a normal system configuration. SCE expects its projected electrical demand to exceed the maximum operating limits by 2024, which would affect SCE's ability to safely and reliably serve the electrical demand within the ENA if unaddressed. Therefore, SCE proposes development of a new subtransmission/distribution substation in the City of Corona referred to as Circle City Substation that would address the forecasted electrical maximum operating limit shortfall in the ENA. The proposed Project and alternatives are considered in light of this information.

This EIR examines all of the resource areas in the California Environmental Quality Act (CEQA) Guidelines Appendix G Checklist and Appendix F, including: Aesthetics; Agriculture and Forestry Resources; Air Quality; Biological Resources; Cultural Resources; Energy Conservation; Geology and Soils; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population and Housing; Public Services; Recreation; Transportation and Traffic; and Utilities and Service Systems.

This Executive Summary includes the following sections:

- Introduction (ES.1);
- Project Objectives (ES.2);
- Project Description (ES.3);
- Alternatives (ES.4);
- Environmentally Superior Alternative (ES.5);
- Areas of Controversy and Issues to be Resolved (ES.6); and
- Summary of Impacts and Mitigation Measures (ES.7).

ES.2 Project Objectives

SCE identified its objectives for the proposed Project in its PEA as follows:

- Serve current and long-term peak electrical demand requirements in the electrical needs area (ENA) as soon as possible after receipt of applicable permits;
- Enhance electrical system reliability by adding transformation and circuitry to serve increased electrical demand and by increasing operational flexibility;
- Construct the new electrical facilities in close proximity to the electrical demand to effectively and efficiently serve the ENA;
- Meet the proposed Project need while minimizing environmental impacts;
- Meet the proposed Project need in a cost-effective manner; and
- Design and construct the proposed Project in conformance with SCE's current engineering, design, and construction standards for substation, transmission, subtransmission, and distribution system projects.

Upon consideration of the Applicant's objectives, electrical demand projections, and other laws and regulations, this EIR identifies the following as the CPUC's basic CEQA objectives:

- Subtransmission Service Objective - Maintain electrical system reliability by addressing overloads on the Mira Loma-Corona-Jefferson and Mira Loma-Corona 66 kV subtransmission lines that could occur under peak electrical demand conditions during the 2017 to 2026 forecast period; and
- Distribution Service Objective - Ensure that the Corona, Jefferson, and Chase substations do not exceed capacity under peak electrical demand conditions through the 2017 to 2026 forecast period.

The CPUC considers these two CEQA objectives to be the underlying purpose for the proposed Project. Under the proposed Project, the Subtransmission Service Objective would be addressed by constructing the proposed Mira Loma-Jefferson subtransmission line and associated facilities; and the Distribution Service Objective would be addressed by the construction of the Circle City Substation, its source lines, and other associated facilities. Each of the alternatives considered is designed to address at least one of these basic objectives. Therefore, each Project alternative would have to meet at least one of these two objectives in order to be considered a viable alternative to the proposed Project.

ES.3 Project Description

Project Components

The Circle City Substation, an unstaffed and automated 66/12 kilovolt (kV) low-profile 56 megavolt-ampere (MVA) substation would be constructed on a 19.5-acre site in the City of Corona. The substation would be comprised of a 420-foot by 387-foot facility located on approximately 11.08 acres of the site. It would include a steel 66 kV switchrack, two 28 MVA

66/12 kV transformers, a 12 kV low-profile steel switchrack, two 12 kV 4.8 MVA reactive capacitor banks, a prefabricated steel Mechanical and Electrical Equipment Room, a permanent restroom, and a new road providing access from Leeson Lane. It would be located approximately 0.25 mile south of the corner of Magnolia Avenue and East 6th Street and would be enclosed on all sides by an 8-foot-high perimeter concrete masonry unit block wall with a light tan color.

In addition, the Project would include construction of four new 66 kV source lines, which would be in two double-circuit configurations and combinations of overhead and underground construction, and construction of the 10.9-mile 66 kV Mira Loma-Jefferson subtransmission line. The source lines (Databank and Pedley) would be located in the City of Corona, and the subtransmission line would be located in portions of northwestern Riverside County, including the cities of Corona, Eastvale, and Norco; and in portions of San Bernardino County, including the cities of Chino and Ontario.

The proposed Project also consists of: upgrades of the existing Mira Loma Substation to accommodate the new Mira Loma-Jefferson Subtransmission Line; construction of approximately six new underground 12 kV distribution getaways exiting the proposed Circle City Substation; relocation of approximately 1.9 miles of an existing 33 kV distribution line to an underground position; and installation of telecommunications facilities to connect the proposed Project to SCE's existing telecommunications system.

Applicant Proposed Measures

SCE has identified 19 Applicant-Proposed Measures (APMs) that it has developed to avoid or reduce anticipated potential impacts of the Project on aesthetics, air quality, biological resources, paleontological resources, hazards and hazardous materials, and transportation. SCE would conduct the design, construction, operation, and maintenance of the Project in accordance with its APMs. For a complete description of each APM, see Chapter 2, *Project Description*, Section 2.10, *Applicant Proposed Measures*. Relevant APMs are also listed in applicable resource sections in Chapter 4.

Moreover, the Project Description incorporates procedures or protocols which directly relate to how the proposed Project would be constructed, and which were considered as part of the proposed Project during preparation of this EIR. The Project Description, therefore, will become part of the Mitigation Monitoring, Reporting and Compliance Program when adopted by the CPUC if the Project or an alternative is approved, and the construction components and methods therein would be monitored by the CPUC.

ES.4 Alternatives

Several alternatives to the Project have been selected for detailed analysis in the EIR, including the No Project alternative, as required by CEQA. The alternatives are organized based on whether they primarily address the Subtransmission Service Objective or the Distribution Service Objective. The alternatives are listed below and are described in detail in Section 3.4:

- Alternative A: No Project;

Subtransmission Service Objective Alternatives

- Alternative B: Mira Loma-Jefferson 66 kV Subtransmission Line without Substation;
- Alternative C1: Underground 66 kV Subtransmission Line along Hellman Avenue;
- Alternative C2: 66 kV Subtransmission Line along Archibald Avenue; and
- Alternative C3: 66 kV Subtransmission-Level Battery Storage.

Distribution Service Objective Alternatives

- Alternative D1: 12 kV Distribution-Level Battery Storage;
- Alternative D2: 66/12 kV Substation Site Alternative;
- Alternative E1: Quarry Street 66 kV Source Lines Segment;
- Alternative E2: Underground Pedley 66 kV Source Lines from Interstate 15 to Circle City Substation;
- Alternative E3: Southern 66 kV Source Lines Alignment; and
- Alternative E4: Databank 66 kV Source Lines Only.

The CPUC may consider various combinations of the above alternatives when deciding whether or not to approve the proposed Project or one or more of the alternatives to address the identified objectives. The three main components of the Project include: the subtransmission line (which addresses the Substation Service Objective), the substation, and the substation source lines (which address the Distribution Service Objective).

ES.5 Environmentally Superior Alternative

For the Subtransmission Service Objective, the Environmentally Superior Alternative is Alternative C1: Underground 66 kV Subtransmission Line along Hellman Avenue. For the Distribution Service Objective, the Environmentally Superior Alternative is Alternative D1: 12 kV Distribution-Level Battery Storage. Refer to Section 5.3, Environmentally Superior Alternative, for additional information.

ES.6 Areas of Controversy and Issues to be Resolved

Areas of controversy known to the lead agency, including issues raised by agencies and the public, must be identified in the Executive Summary of an EIR (14 Cal. Code Regs. §15123). The scoping period for this Project began on January 29, 2016, and closed on February 29, 2016.

A Scoping Report prepared for the Project is provided in Appendix A. It includes all of the comments received during the scoping period, and describes how each was addressed. The overarching themes in the comments received relate to the following:

- Aesthetic impacts of substation and new aboveground subtransmission lines from residences, commercial areas, and roadways.
- Biological resources and potential impacts to habitat for wildlife, including the Santa Ana River and Prado Regional Park and Nature Preserve.
- Hazards relating to a fault and high winds in the Project area and health concerns about transmission lines.
- Hydrology and water quality, including potential impacts related to crossing the Santa Ana River.
- Land use, including potential conflicts with local land use policies.
- Transportation and traffic impacts of the Project contributing to congestion; cumulative traffic impacts in particular.
- Alternatives, including the installation of Project components underground.

ES.7 Summary of Impacts and Mitigation Measures

Table ES-1 summarizes each of the environmental impacts of the Project and mitigation measures recommended to avoid or substantially reduce them. Impacts of the Project are analyzed in detail in Chapter 4, *Environmental Analysis*. Resource areas evaluated include:

4.1 Aesthetics
4.2 Agriculture and Forestry Resources
4.3 Air Quality
4.4 Biological Resources
4.5 Cultural Resources
4.6 Energy Conservation
4.7 Geology and Soils
4.8 Greenhouse Gas Emissions
4.9 Hazards and Hazardous Materials
4.10 Hydrology and Water Quality
4.11 Land Use and Planning
4.12 Mineral Resources
4.13 Noise
4.14 Population and Housing
4.15 Public Services
4.16 Recreation
4.17 Transportation/Traffic
4.18 Utilities and Service Systems

TABLE ES-1
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
1. Aesthetics			
Impact 4.1-1: The Project could adversely affect scenic vistas.	Class I	**Mitigation Measure 4.1-1:** SCE and/or its contractors shall use subtransmission line conductors that are non-specular and non-reflective and insulators that are non-reflective.	Significant and Unavoidable
Impact 4.1-2: Construction of the Project could degrade the existing visual character or quality of the sites and their surroundings during the construction period.	Class III	None required.	Less than Significant
Impact 4.1-3: Operation of the Project could substantially degrade the existing visual character or quality of the site and its surroundings.	Class I	Implement Mitigation Measure 4.1-1.	Significant and Unavoidable
Impact 4.1-4: Construction and operation of the Project would create new sources of light and/or glare that could adversely affect day or nighttime views in the area.	Class II	Implement Mitigation Measure 4.1-1.	Less than Significant with Mitigation
2. Agriculture and Forestry Resources			
Impact 4.2-1: The Project would convert Farmland to non-agricultural use.	Class II	**Mitigation Measure 4.2-1:** Prior to commencement of construction activities, SCE shall obtain permanent agricultural conservation easements at a one to one (1:1) ratio for Prime Farmland or Unique Farmland to be permanently converted by the Project. Conservation easements shall be on land within San Bernardino County or Riverside County of at least equal quality and size as land disturbed by the Project, as determined by the CPUC. Mitigation via agricultural conservation easement shall be satisfied under the following conditions: 1. SCE shall acquire farmland and shall establish an easement for the portion of the land that will no longer be used for agricultural land equal to the acreage converted. SCE shall provide evidence to the CPUC documenting the easement acquisition prior to the commencement of construction activities on the Farmland to be converted. The acquired easement shall be in an area designated for long-term future agricultural use; or 2. SCE shall pay a fee equal to or greater than the value of a previous farmland conversion transaction in the planning area plus the estimated cost of legal appraisal and other costs, including staff time, to acquire property for agricultural mitigation. The fee shall be used for farmland mitigation purposes, with priority given to lands with prime agricultural soils and habitat value. SCE shall provide evidence to the CPUC documenting fee payment prior to the commencement of construction activities on the Farmland to be converted.	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
3. Air Quality			
Impact 4.3-1: Construction activities would generate pollutant emissions that would conflict or obstruct implementation of the applicable air quality plan.	Class I	Implement Mitigation Measures 4.3-2a (Fugitive Dust Controls) and 4.3-2b (Construction Equipment Exhaust Reductions).	Significant and Unavoidable
Impact 4.3-2: Construction activities would generate pollutant emissions that would contribute substantially to an existing or projected air quality violation.	Class I	**Mitigation Measure 4.3-2a: Fugitive Dust Controls.** The following fugitive dust control measures shall be implemented during the construction phase by SCE and/or its construction contractors: • Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities. • Use a gravel apron on unpaved truck exit routes, 25 feet long by road width, to reduce mud/dirt trackout; • Graded and/or excavated inactive areas of the construction site shall be monitored by SCAQMD air district or approved third party at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust; • During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard off site. Dust emissions that are visible off site would be considered as one factor indicating a potential nuisance or hazard. The site superintendent/supervisor shall use his/her discretion in conjunction with the SCAQMD in determining when winds are excessive; • Require paved streets that adjoin unpaved roads where vehicles would be entering and exiting to be swept by Rule 1186 compliant PM10 efficient vacuum units (14-day frequency); • All trucks hauling dirt, sand, or other loose materials are to be tarped with a fabric cover and maintain a freeboard height of at least 12 inches; • Personnel involved in grading operations, including contractors and	Significant and Unavoidable

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.	
		Mitigation Measure 4.3-2b: Construction Equipment Exhaust Reductions. For all diesel-fueled off-road construction equipment, SCE shall make a good faith effort to use available construction equipment that meets Tier 4, the highest USEPA-certified tiered emission standard. An Exhaust Emissions Control Plan that identifies each off-road unit's certified tier specification and Best Available Control Technology (BACT) shall be submitted to the CPUC for review and approval at least 30 days prior to commencement of construction activities. Construction activities cannot commence until the Plan has been approved. For all pieces of equipment that would not meet Tier 4 emission standards, the Exhaust Emissions Control Plan shall include recent documentation from at least two local heavy construction equipment rental companies that indicates that the companies do not have access to higher-tiered equipment for the given class of equipment.	
Impact 4.3-3: Operation and maintenance activities would generate pollutant emissions that could contribute to an existing or projected air quality violation.	Class III	None required.	Less than Significant
Impact 4.3-4: Construction activities would result in emissions of PM10 and NOx that would be cumulatively considerable**.**	Class I	Implement Mitigation Measures 4.3-2a (Fugitive Dust Controls) and 4.3-2b (Construction Equipment Exhaust Reductions).	Significant and Unavoidable
Impact 4.3-5: Operation and maintenance activities would result in emissions of criteria pollutants that would not be cumulatively considerable.	Class III	None required.	Less than Significant
Impact 4.3-6: Construction activities would generate emissions of criteria pollutants and precursors, potentially exposing sensitive receptors to harmful pollutant concentrations.	Class I	Implement Mitigation Measures 4.3-2a (Fugitive Dust Controls) and 4.3-2b (Construction Equipment Exhaust Reductions).	Significant and Unavoidable
Impact 4.3-7: Construction activities would generate emissions of Toxic Air Contaminants, potentially exposing sensitive receptors to harmful pollutant concentrations.	Class II	**Mitigation Measure 4.3-7**: **Use of Tier-3 Engines at the Circle City Substation Site**. SCE (and/or its construction contractor(s)) shall ensure that at all diesel-powered equipment used during construction activities at Circle City Substation meets at least USEPA-certified Tier 3 emissions standards, or is otherwise equipped with Level 3 diesel particulate filters (DPFs). An initial listing that identifies each off-road unit's certified tier specification and/or DPF status to be operated at the Circle City Substation shall be submitted to the CPUC for review and approval prior to commencement of construction activities at the Circle City Substation site. Construction activities at the Circle City Substation site shall not	Less than Significant with mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		commence until the equipment listing has been approved by the CPUC. As SCE requires new or replacement construction equipment at the Circle City Substation site, SCE shall submit verification of the certified engine tier or Level 3 DPF retrofit prior to use at the site.	
Impact 4.3-8: Construction activities could expose local sensitive receptors to *Coccidioides immitis* spores.	Class II	Implement Mitigation Measure 4.3-2a (Fugitive Dust Controls).	Less than Significant with Mitigation
Impact 4.3-9: Operation and maintenance activities would generate emissions of Toxic Air Contaminants but would not expose sensitive receptors to harmful pollutant concentrations.	Class III	None required.	Less than Significant
Impact 4.3-10: Construction and operation would not create objectionable odors.	Class III	None required.	Less than Significant
4. Biological Resources			
Impact 4.4-1: Construction activities would result in adverse impacts to special-status plants, if present.	Class II	**Mitigation Measure 4.4-1a**: In portions of the alignments and work areas that have not been surveyed for special-status plants, SCE and/or its contractors shall complete focused plant surveys following CDFW and USFWS special-status plant survey guidelines. Surveys shall document the location, extent, and size of rare plant populations in the study area for each project component, and shall be used to inform the planned avoidance of special-status plant populations whenever possible. Based on focused plant survey findings, to the extent feasible, the final project design shall minimize impacts on known special-status plant populations within and adjacent to the construction footprints, with complete avoidance of any federal or State-listed plant species. SCE and/or its contractors shall design facilities to avoid sensitive plant populations whenever possible, shall install exclusion fencing around sensitive plant populations with as large a buffer as possible to minimize the potential for direct and indirect impacts. **Mitigation Measure 4.4-1b:** To supplement special-status plant protection actions provided by APM BIO-02 in areas where avoidance of non-listed plant species is not feasible or not covered under the MSHCP, SCE and/or its contractors shall compensate for the loss through plant salvage and replanting, as follows: A qualified ecologist shall develop a Restoration and Mitigation Plan according to CDFW guidelines and in coordination with CDFW. At minimum, the plan shall include collection of complete plants or reproductive structures (as appropriate) from affected plants, a full description of microhabitat conditions necessary for each affected species, seed germination requirements, proposed restoration techniques for temporarily disturbed occurrences, an assessment of	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		potential transplant and enhancement sites, a description of performance criteria (e.g., establishment of a comparably-sized plant population; 80 percent survival after 5 years), and a monitoring program of sufficient duration (e.g., 5 years) to follow the progress of transplanted or seeded individuals, and contingency measures to be implemented in the event that the project does not achieve the year 5 success criteria. If impacts to rare plants are covered under the MSHCP, with SCE participation, then this measure would not apply.	
Impact 4.4-2: Construction activities would result in adverse impacts to special-status reptiles and amphibians, if present.	Class II	**Mitigation Measure 4.4-2:** Within areas that provide potentially suitable habitat for special-status amphibians and reptiles, SCE and/or its contractors shall have a qualified wildlife biologist perform preconstruction surveys no more than 24 hours prior to initial ground disturbance to identify the potential presence of western pond turtle, coast horned lizard, silvery legless lizard, two-striped garter snake, south coast garter snake, and western spadefoot. If any of these species are identified during surveys within the immediate construction area footprint, individuals shall be relocated from work areas by an individual who is authorized by CDFW to undertake species relocation. A suitable relocation area shall be identified and a qualified biologist with appropriate CDFW approvals shall relocate animals from the work area.	Less than Significant with Mitigation
Impact 4.4-3: Construction activities would result in adverse impacts to Riverside fairy shrimp and vernal pool fairy shrimp, if present.	Class II	**Mitigation Measure 4.4-3a:** If the USFWS accepts the current negative survey findings for special-status fairy shrimp in the Project area under the prior survey protocol, no further action is needed. Otherwise, within areas that provide potentially suitable vernal pool habitat for special-status fairy shrimp, vernal pool surveys in accordance with the revised USFWS *Survey Guidelines for the Listed Large Branchiopods* (USFWS, 2015) shall be conducted. Portions of the Project sites fall within the Survey Zone C for listed large branchiopods. The revised protocol requires one wet season and one dry season survey over a three-year period and is summarized as follows: *Wet Season Survey for Survey Zone C* • All potential habitats must be adequately sampled at 7-day intervals after initial inundation of habitat. • Sampling will continue within each potential habitat until it dries or a minimum of 120 consecutive days of inundation has occurred. • Sampling will be reinitiated within 7 days of an individual habitat drying and inundating during the same wet season. • A single wet season survey may be considered unreliable at any	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		location if moderate to extreme drought conditions persist through the wet season as determined by the National Oceanic and Atmospheric Administration (NOAA) records of the Palmer drought indices. • In order to increase the probability of detection of all possible co-occurring species, USFWS may request one subsequent complete wet season sampling survey be conducted to complete survey requirements. This would likely be required if the dry season survey results indicated branchiopods were present where a previous wet season survey found no branchiopods. *Dry Season Survey* • Dry season soil/substrate sampling shall not be conducted at any Project site unless SCE receives prior authorization from the USFWS. • Soil (substrate) shall be collected when it is dry to avoid damaging or destroying listed large branchiopod eggs (also known as cysts or resting eggs) and other special-status vernal pool species. • The number of soil/substrate samples and the amount of soil/substrate collected per feature shall be proportional to the size of the feature. • Soil/Substrate shall be collected mainly from the lowest topographic areas within the feature sampled. If listed branchiopods are detected, USFWS shall be notified within 10 working days. Upon completion of protocol surveys the permittee shall submit a report no more than 90 days after the last wet season field visit or after completion of analysis of dry season samples to USFWS.	

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		Mitigation Measure 4.4-3b: If vernal pool fairy shrimp or Riverside fairy shrimp are identified in the Project area and impacts to occupied pools cannot be avoided, SCE shall mitigate for impacts to vernal pool fairy shrimp habitat and comply with the requirements of the FESA through one or more of the following steps to provide compensatory habitat: (a) participation in the MSHCP to obtain take coverage for identified species, (b) salvage of cysts and creation of replacement pool habitat in the local area at a replacement ratio of at least 3:1, (c) restoration of affected pools onsite after the completion of construction, or (d) acquisition of credits from an approved mitigation bank within the Project region. If occupied habitat for the above species is encountered at a Project site, to mitigate for temporary or permanent loss of aquatic sites, SCE shall implement the following measures: • SCE shall mitigate for the loss of branchiopod habitat that will be filled or otherwise directly affected by the project by providing compensatory habitat. • SCE shall develop and implement a mitigation, monitoring, and management plan, with input from regulatory agencies that shall outline long-term management strategies and performance standards to be attained to compensate for habitat losses resulting from the project. At a minimum, the plan shall include standards for mitigation site selection and construction specifications for mitigation sites, a description of site conditions including aerial maps, an analysis of local branchiopod habitat, and performance criteria by which site quality can be assessed over time (e.g., size, vegetation species present, date of initial ponding, ponding duration, and wildlife usage). A monitoring program will be established to track the development of habitat conditions that are conducive to the establishment of vernal pool branchiopods. • To the greatest practicable extent, SCE or its contractors shall construct compensation habitat (i.e., replacement pools) before habitat disturbances are incurred; or directly within the project footprint after construction. A qualified biologist shall ensure that ponds are functioning as designed. • SCE shall submit the name and credentials of a biologist qualified to act as construction monitor to USFWS for approval at least 15 days before construction work begins. • With concurrence from the USFWS, a USFWS-approved biologist shall salvage soils from sites that are known to support vernal pool	

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		branchiopods at least 2 weeks before the onset of construction, or during the preceding dry season if pools are anticipated to hold water when construction begins. The salvaged soil samples will be stored and used to inoculate created pools once minimum performance standards are met at these locations. • A USFWS-approved biologist shall be present at each active work site within 0.5-mile of potential fairy shrimp habitat until habitat disturbance has been completed. Thereafter, the contractor or SCE shall designate a person to monitor onsite compliance with all minimization measures. A USFWS-approved biologist shall ensure that this individual receives training consistent with USFWS requirements. • A USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of fairy shrimp and their habitat, the importance of these species and their habitat, the general measures that are being implemented to conserve fairy shrimp as they relate to the project, and the boundaries within which the project construction shall occur. • All fueling and maintenance of vehicles and other equipment and staging areas will occur at least 100 feet from any fairy shrimp habitat.	
Impact 4.4-4: Construction activities would result in adverse impacts to special-status fish, if present	Class II	**Mitigation 4.4-4:** This measure shall apply if SCE does not participate in the MSHCP. SCE shall coordinate with the USFWS to ensure that earthwork in the Santa Ana River corridor either: 1) does not impact the Santa Ana sucker or habitat for this species, or; 2) any Santa Ana sucker relocation or habitat modification that may affect this species is performed with advance USFWS knowledge and approval. In addition, SCE shall implement the following measures: • A qualified biologist who holds the appropriate Section 10(a)(1)(A) permit shall survey for Santa Ana sucker following the USFWS protocol within 14 days prior to in-water work to determine the potential presence of this species. Surveys shall also include presence/absence determinations for arroyo chub and Santa Ana Speckled dace. • A qualified biologist shall supervise the installation of barrier nets to be installed in open water upstream and downstream from the work area. The qualified biologist shall check the integrity of barrier nets daily to ensure there are no gaps that may allow fish passage into	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		the work area. • The relocation of Santa Ana suckers from within isolated aquatic work areas shall only be performed by a USFWS-approved biologist(s). Work shall not proceed until a qualified biologist has confirmed that special-status fish are not present within the isolated work area.	
Impact 4.4-5: Construction activities would result in adverse impacts to least Bell's vireo, Southwestern willow flycatcher, yellow-billed cuckoo, and their habitats.	Class II	**Mitigation Measure 4.4-5a:** APM BIO-06 shall also be applied to protect southwestern willow flycatcher should this species be encountered during pre-construction surveys or Project activities. **Mitigation Measure 4.4-5b:** Should SCE not opt to participate in the MSHCP, the following additional measures shall be followed to avoid, minimize, and/or mitigate impacts to least Bell's vireo, southwestern willow flycatcher, and/or yellow-billed cuckoo and their habitat: • If USFWS/CDFW protocol-level surveys document the presence of least Bell's vireo, southwestern willow flycatcher, and/or yellow-billed cuckoo within active work areas or areas within 500 feet, impacts to these species would be mitigated to less than significant if occupied riparian forest is avoided and construction within 500 feet of occupied habitat occurs only between September 15 and March 15. • Occupied and potentially occupied habitat for least Bell's vireo, southwestern willow flycatcher, and/or yellow-billed cuckoo shall be avoided to the extent feasible. If complete avoidance of occupied or potentially occupied habitat is not feasible, additional or alternative measures to avoid or minimize adverse project effects to least Bell's vireo, southwestern willow flycatcher, and/or yellow-billed cuckoo may be required by the USFWS and CDFW. However, if the above measures cannot be implemented such that "take" of these species is fully avoided, authorization shall be obtained from the USFWS and CDFW prior to initiating work within 500 feet of occupied habitat. Such measures may include habitat restoration requirements, as described in Mitigation Measure 4.4-5c. **Mitigation Measure 4.4-5c:** As identified in APMs BIO-06 and BIO-10, SCE has committed to prepare a riparian mitigation plan in the format of a Determination of Biologically Equivalent of Superior Preservation report (DBESP report) as part of the Participating Special Entity (PSE) review process under the MSHCP. SCE shall implement this plan to restore impacted habitat values for the least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo in the Santa Ana River corridor. The RCA would request USFWS and CDFW concurrence with	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		the MSHCP "findings of consistency." The DBESP report guidelines are highly specific regarding the magnitude of anticipated impacts and restoration requirements, some of which include: • Quantification of unavoidable impacts to riparian/riverine areas associated with the project, including direct and indirect effects. • Functions and values assessment focusing on how they will affect downstream values related to Conserved Species. • Habitat assessments for least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo. If the site supports suitable habitat, focused surveys will also be required. • A written description project design features and mitigation measures that reduce indirect effects, such as edge treatments, landscaping, elevation difference, minimization and/or compensation through restoration or enhancement. • A description of mitigation measures to ensure long-term conservation through deed restriction, conservation easement or other appropriate mechanism. • Restoration measures shall consider: a) Restoration and/or enhancement of on-site habitat; b) Restoration and/or enhancement of off-site habitat; c) Habitat that is restored or enhanced will be able to provide biological, hydrological, and biogeochemical functions to a level consistent with those being lost on-site; and d) Upon reaching maturity and satisfying the criteria established for mitigation areas, the goals for restoration shall include: i. All habitat mitigation areas will be self-sustaining in perpetuity and contribute to regional biodiversity ii. All habitat mitigation will not require outside input for recruitment and propagation of plant species iii. Nutrients will be cycled within the mitigation areas through natural processes iv. The entire range of biological components, processes,	

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		and interactions will be present in each community; and v. Natural processes of ecological succession will be allowed to occur.	
Impact 4.4-6: Construction activities would result in adverse impacts to burrowing owl.	Class III	None required.	Less than Significant
Impact 4.4-7: Construction activities would result in adverse impacts to nesting birds and raptors protected under MBTA, BGEPA, and Fish and Game Code.	Class III	None required.	Less than Significant
Impact 4.4-8: Installation of power lines and poles would result in collisions and/or electrocution of birds, especially raptors.	Class III	None required.	Less than Significant
Impact 4.4-9: Construction activities would temporarily result in adverse impacts to sensitive natural communities, such as willow riparian forest, coastal sage scrub, and grassland.	Class II	Implement Mitigation Measure 4.4-5c. **Mitigation Measure 4.4-9a:** Apply Restoration Planning Methodology identified in Mitigation Measure 4.4-5c to Non-riparian Special-status Vegetation, which includes Riversidean Sage Scrub. **Mitigation Measure 4.4-9b:** To mitigate impacts to riparian habitat, SCE shall prepare a project-wide 1602 Lake and Streambed Alteration Agreement (LSAA) in accordance with CDFW requirements. SCE shall include mitigation measures that are sufficient to reduce direct and indirect impacts to willow riparian forest habitat to less than significant. The LSAA may include some or all of the following: • Avoid impacts to riparian habitat where possible by shifting staging areas or adjusting construction timing; • Minimize impacts; • Remove invasive riparian species; • Purchase off-site habitat credits; • Create and/or restore natural communities and prepare a monitoring and maintenance plan for these areas (consistent with methodology discussed in Mitigation Measure 4.4-5b); • Situate staging areas as far away from sensitive habitats as is feasible; • Limit construction activity to daylight hours to minimize potential	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		impacts related to artificial lighting; and • Require the presence of a qualified biological monitor during all construction activities that are within or near sensitive habitats and areas that have been identified to host least Bell's vireo, southwestern willow flycatcher, or yellow-billed cuckoo.	
Impact 4.4-10: Construction activities would result in the placement of fill material into jurisdictional waters of the U.S., including wetlands subject to USACE jurisdiction under the federal CWA, and the potential loss and degradation of wetland habitats protected under state regulations.	Class II	Implement Mitigation Measure 4.4-5c, Sensitive Habitat Restoration, to the Restoration of Jurisdictional Waters of the U.S., including Wetlands..	Less than Significant with Mitigation
Impact 4.4-11: The Project could interfere with the movement of a native wildlife species or with established native resident or migratory wildlife corridors.	Class III	None required.	Less than Significant
Impact 4.4-12: The Project activities would disturb special-status bats or maternity bat roosts, if present.	Class II	**Mitigation Measure 4.4-12:** SCE shall ensure that a preconstruction survey for roosting bats shall be conducted by a qualified biologist prior to construction activities to characterize potential bat habitat and identify active roost sites. Surveys shall be conducted within 100 feet of construction activities. If an active bat roost being used for maternity is found within 100 feet of the construction activities, a no-disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the qualified biologist. Should potential roosting habitat or active bat roosts be found in trees to be removed or trimmed or poles to be replaced under the Project, SCE shall implement the following measures: 1. Removal or trimming of trees and/or poles with potential bat roosting habitat or active roosts shall occur when bats are active (i.e., not in torpor or hibernation), approximately between the periods of March 1 to March 15, and September 15 to October 15; outside of bat maternity roosting season (approximately March 15 to September 15) and outside of months of winter torpor (approximately October 15 to February 28) to the extent feasible. 2. The biologist shall be present during tree and pole removal if potential roosting habitat or active bat roosts are present. Trees and poles with potential roosting habitat or active roosts shall be removed only when no rain is occurring or is forecast to occur for 3 days, when daytime nighttime temperatures are at least 50 °F, and when wind speeds are less than 15 mph. 3. Removal of trees or branches with active or potentially active roost	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		sites shall follow a two-step removal process: a. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws or hand tools. b. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or hand tools or other equipment (e.g. excavator or backhoe). 4. Removal of structures containing or suspected to contain active bat roosts shall be partially dismantled under the supervision of the qualified biologist in the evening prior to the emergence of bats. Structures shall be partially dismantled to significantly change the roost conditions, causing adult bats to abandon the roost and seek new roosting locations. Removal shall be completed the subsequent day. 5. Bat roosts that begin during construction are presumed to be unaffected, and no buffer would be necessary. Direct impacts to bat roosts or take of individual bats shall be avoided.	
Impact 4.4-13: Project activities could require protected tree removal and/or trimming.	Class III	None required.	Less than Significant
Impact 4.4-14: The project could conflict with the Western Riverside MSHCP.	Class III	None required.	Less than Significant
5. Cultural Resources			
Impact 4.5-1: Implementation of the Project could cause a substantial adverse change in the significance of the Grand Boulevard Historic District.	Class II	**Mitigation Measure 4.5-1:** Prior to commencing Project-related construction activities associated with the Pedley Source Lines or the Alternative E4 telecommunication line, an architectural historian meeting the Secretary of the Interior's Professional Qualifications Standards for Architectural History shall assist Project engineers in identifying and labeling for avoidance on construction plans all contributing elements of the Grand Boulevard Historic District (P-33-006444) located in or adjacent to the Project Area – these contributing elements to the District shall subsequently be avoided during Project implementation.	Less than Significant with Mitigation
Impact 4.5-2: Implementation of the Project could cause a substantial adverse change in the significance of previously undiscovered historical resources.	Class II	**Mitigation Measure 4.5-2:** If prehistoric or historic-era archaeological resources are encountered during Project implementation, SCE and/or its contractors shall immediately cease all construction activity within 100 feet of the find and flag off the area for avoidance. The CPUC and a	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		qualified archaeologist, defined as one meeting the U.S. Secretary of the Interior's Professional Qualifications Standards for Archeology, shall be immediately informed of the discovery. The qualified archaeologist shall inspect the find within 24 hours of discovery and notify the CPUC of their initial assessment. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or toolmaking debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-era materials might include building or structure footings and walls, and deposits of metal, glass, and/or ceramic refuse. If the CPUC determines, based on recommendations from the qualified archaeologist, that the resource may qualify as a historical resource or unique archaeological resource (as defined in CEQA Guidelines §15064.5), or a tribal cultural resource (as defined in PRC §21074), the resource shall be avoided if feasible. Avoidance means that no activities associated with the Project that may affect cultural resources shall occur within the boundaries of the resource or any defined buffer zones. If avoidance is not feasible, the CPUC shall consult with appropriate Native American tribes (if the resource is Native American-related), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4(b). This shall include documentation of the resource and may include data recovery or other measures. Any treatment other than preservation in place must be approved by the CPUC and the appropriate tribe if applicable. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource. The resource and treatment method shall be documented in a professional-level technical report to be filed with the California Historical Resources Information System (CHRIS). Work in the area may commence upon completion of approved treatment and under the direction of the qualified archaeologist.	
Impact 4.5-3: Implementation of the Project could cause a substantial adverse change in the significance of previously undiscovered archaeological resources.	Class II	Implement Mitigation Measure 4.5-2 (see above).	Less than Significant with Mitigation
Impact 4.5-4: Project implementation could directly destroy a unique paleontological resource.	Class II	**Mitigation Measure 4.5-4:** The Paleontological Resources Management Plan, required by APM PAL-01, shall include the following monitoring and treatment requirements.	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		Monitoring Requirements. Before and during Project-related ground disturbing activities, Project work shall be conducted such that any fossil remains encountered are recovered in their entirety. The monitoring measures in the Paleontological Resources Management Plan shall be conducted in accordance with Society of Vertebrate Paleontology standards and include, but not be limited to, the following: • Geotechnical borings collected during geotechnical investigations, as available, shall be reviewed by a professional paleontologist for subsurface paleontological potential prior to construction. If the professional paleontologist identifies units with high or moderate paleontological potential in the geotechnical borings, the professional paleontologist shall incorporate any additional monitoring recommendations needed to conduct work such that any unique paleontological resources are not destroyed. • Qualified personnel shall monitor excavations in areas identified as having moderate to high sensitivity for paleontological resources, and in areas mapped as Qaf, Qw, Qf, Qyw, Qyf, Qya, or Qye but which include excavations greater than 10 feet deep. • Qualified personnel shall be equipped to salvage and recover fossils and take sediment samples, and shall be empowered to temporarily halt or divert construction equipment to allow removal of abundant/large specimens. • Should the ongoing monitoring results indicate that the paleontological sensitivity of the subsurface sediments within the project area is lower or higher than anticipated, the monitoring level of effort shall be adjusted (increased, decreased, or suspended) accordingly. • If subsurface fossils are encountered during construction and monitor is not present, qualified paleontologist should be notified immediately and work in the immediate area (50 feet) of the discovery should cease until discovery can be evaluated. **Treatment requirements.** Any fossils collected during Project activities must be placed in an accredited scientific institution for the benefit of current and future generations. The treatment requirements in the Paleontological Resources Management Plan shall be conducted in accordance with Society of Vertebrate Paleontology standards and include, but not be limited to, the following: • Preparation of specimens by qualified professionals to a point of identification and permanent preservation. • Preparation by qualified professionals of a report of findings and inventory	

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		of resources recovered. • Placement of any collected fossils in an accredited museum repository with permanent retrievable paleontologic storage. • Documentation of curation into an established museum repository (prior to which treatment shall not be considered complete).	
Impact 4.5-5: Project construction could result in damage to previously unidentified human remains.	Class II	**Mitigation Measure 4.5-5:** If human remains are uncovered during Project construction, SCE and/or its contractors shall immediately halt all work, contact the appropriate county coroner to evaluate the remains, and follow the procedures and protocols set forth in CEQA Guidelines Section 15064.5 (e)(1). If the county coroner determines that the remains are Native American, SCE and/or its contractors shall contact the NAHC, in accordance with HSC Section 7050.5, subdivision (c), and PRC Section 5097.98 (as amended by AB 2641). Per PRC Section 5097.98, SCE shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until SCE and/or its contractor has discussed and conferred, as prescribed in this section (PRC §5097.98), with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.	Less than Significant with Mitigation
Impact 4.5-6: Implementation of the Project could cause a substantial adverse change in the significance of previously unknown tribal cultural resources.	Class II	Implement Mitigation Measures 4.5-2 and 4.5-5.	Less than Significant with Mitigation
6. Energy Conservation			
Impact 4.6-1: Construction, operation, and maintenance would result in the consumption of energy.	Class II	**Mitigation Measures 4.6-1:** SCE shall contract a qualified professional (i.e., construction planner/energy efficiency expert) to prepare a Construction Equipment Efficiency Plan that identifies the specific measures that SCE (and its construction contractors) will implement as part of Project construction to increase the efficient use of construction equipment to the maximum extent feasible. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; and identification of procedures (including the routing of haul trips) that shall be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner. The plan shall be submitted to CPUC for review and approval at least 30 days prior to the beginning of construction activities.	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
Impact 4.6-2: Construction could adversely affect existing energy resources.	Class III	None required.	Less than Significant
7. Geology and Soils			
Impact 4.7-1: Strong seismic ground shaking could damage Project structures exposing people to risks.	Class III	None required.	Less than Significant
Impact 4.7-2: The project would result in increased risk of substantial adverse effects involving liquefaction.	Class II	**Mitigation Measure 4.7-2:** SCE or its contractor shall conduct a design-level geotechnical investigation for all of the approved Project sites and alignments that have not yet been investigated and shall prepare a geotechnical report documenting the results of the investigation. This investigation shall evaluate water table depth, faulting and seismicity, liquefaction potential, physical properties of subsurface soils (including soil expansion), seismic settlement, and potential for soil collapse and lateral spreading. The geotechnical investigation shall be prepared and certified by a California-licensed professional engineer or engineering geologist, and shall include earthwork, grading, design, and construction recommendations (e.g., soil treatment/conditioning or engineered fill replacement) to reduce the exposure of structures to seismic-related ground failure, including liquefaction hazards, and to other hazards resulting from soil properties. Measures that may be used to reduce impacts could include, but are not limited to: • Liquefaction: soil densification and compaction, excavation, and removal or recompaction of potentially liquefiable soils, design and installation of deep foundations or reinforced shallow foundations; and/or avoidance of highly unstable areas; and • Expansive soil: excavation of expansive soil, draining water away from expansive soils, ground-treatment processes. SCE shall provide documentation to the CPUC prior to the commencement of construction that demonstrates these measures have been incorporated into Project designs.	Less than Significant with Mitigation
Impact 4.7-3: The project could result in soil erosion or loss of topsoil.	Class II	Implement Mitigation Measure 4.3-1a.	Less than Significant with Mitigation
Impact 4.7-4: Sections of the Project alignment would be located on soil that could become unstable as a result of the Project.	Class II	Implement Mitigation Measure 4.7-2.	Less than Significant with Mitigation
Impact 4.7-5: Portions of the Project would be located on expansive soil, creating risks to life and property.	Class II	Implement Mitigation Measure 4.7-2.	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
8. Greenhouse Gas Emissions			
Impact 4.8-1: The Project would generate GHG emissions.	Class III	None required.	Less than Significant
9. Hazards and Hazardous Materials			
Impact 4.9-1: Construction and operation and maintenance would require the use of hazardous materials that could pose a potential hazard to the public or the environment if improperly used or inadvertently released.	Class II	**Mitigation Measure 4.9-1:** As identified in APM HAZ-01, SCE shall prepare and implement a Hazardous Materials Management Plan. The plan shall be prepared and submitted to CPUC for review and approval at least 30 days prior to the start of construction. The plan shall include, but not be limited to, the following requirements: 1. SCE shall prepare a Hazardous Substance Control and Emergency Response Plan (Plan) and implement it during construction to ensure compliance with all applicable federal, state, and local laws and guidelines regarding the handling of hazardous materials. If the Project would result in the storage or handling of a Threshold Quantity or greater of a hazardous substance as defined by the California Hazardous Materials Release Response Plan and Inventory Law, the Plan shall include preparation and implementation of a Hazardous Materials Business Plan that describes the hazardous materials usage, storage, and disposal to the appropriate Certified Unified Program Agency (San Bernardino County Fire Department, Hazardous Materials Division, and/or Riverside County Department of Environmental Health, Hazardous Materials Branch, as applicable). The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities. The Plan shall require that SCE and/or its contractors shall implement construction best management practices including but not limited to the following: a. Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction. b. Avoid overtopping construction equipment fuel gas tanks. c. Use tarps and oil-absorbent pads under vehicles when refueling to contain and capture any spilled fuel. d. During routine maintenance of construction equipment, properly contain and remove grease and oils.	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		e. Properly dispose of discarded containers of fuels and other chemicals. f. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. g. If potentially contaminated materials are encountered during excavation, work shall stop at that location and SCE's Spill Response Coordinator shall be called to the site to make an assessment and notify the proper authorities, including CPUC. The potentially contaminated soil shall be segregated into lined stockpiles or placed in dump trucks or roll-off containers, sampled, and tested to determine appropriate handling, treatment, and disposal options. If the soil is classified as hazardous, it shall be properly managed on location before being transported in accordance with United States Department of Transportation regulations using a Uniform Hazardous Waste Manifest to a Class I Landfill or other appropriate soil treatment or recycling facility 2. SCE shall prepare and implement a Health and Safety Plan to ensure the health and safety of construction workers and the public during construction. The plan shall include information on the appropriate personal protective equipment to be used during construction, spill containment, emergency response, and other safety requirements consistent with OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) guidelines. 3. SCE shall ensure that the Workers Environmental Awareness Plan (WEAP) includes training on site-specific physical conditions to improve hazard materials release prevention and include a review of the Fire Management Plan (APM HAZ-02), Health and Safety Plan, and the Hazardous Substance Control and Emergency Response Plan. The CPUC mitigation monitor shall attend the first WEAP training program. SCE shall submit documentation to the CPUC prior to the commencement of construction activities that each worker on the project has undergone this training program.	
Impact 4.9-2: Construction could release previously unidentified hazardous materials into the environment.	Class II	Implement Mitigation Measure 4.9-1.	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
Impact 4.9-3: Construction activities could release hazardous materials within the vicinity of an existing school.	Class II	Implement Mitigation Measures 4.3-2a, 4.3-2b, and 4.9-1. **Mitigation Measure 4.9-3:** SCE shall coordinate construction activities with the administration of Auburndale Intermediate School to ensure that construction activities associated with the Mira Loma-Jefferson 66 kV Subtransmission Line are not conducted within 50 meters (164 feet) of the school while students are on campus (e.g., during non-school hours and/or during breaks in the school year). SCE shall provide the CPUC with documentation of the coordination with the school administration at least 60 days before work would begin within the vicinity of the school.	Less than Significant with Mitigation
Impact 4.9-4: Construction, operation, and maintenance of the Project could result in an aviation safety hazard for people residing or working in the project area.	Class II	**Mitigation Measure 4.9-4:** In the event that the Federal Aviation Administration (FAA) provides SCE with aviation safety recommendations for the project, SCE shall implement the recommendations to the extent feasible. If SCE determines that the recommendation is not feasible, SCE must consult with FAA to identify how the intent of the recommendation, in terms of aviation safety, can be achieved in a feasible manner to ensure that construction, operation, and maintenance of the Project would not result in an aviation safety hazard for people residing or working in the project area. SCE shall submit to the CPUC a detailed report identifying the specific reasons why it has determined that the recommendations are not feasible. The report shall include documentation of SCE's correspondences with FAA and present an FAA-agreed-upon solution to implement and achieve the aviation safety intent of the FAA recommendations that ensures construction, operation, and maintenance of the Project would not result in an aviation safety hazard for people residing or working in the project area. The report shall be submitted to the CPUC for approval at least 90 days prior to installation of any project component.	Less than Significant with Mitigation
Impact 4.9-5: Construction of the Project could interfere with an emergency response or evacuation plan.	Class II	Implement Mitigation Measure 4.17-1.	Less than Significant with Mitigation
Impact 4.9-6: Construction could increase the probability of a wildfire.	Class II	**Mitigation Measure 4.9-6:** SCE and/or its contractors shall prepare and implement a Fire Safety Plan to ensure the health and safety of construction workers and the public. SCE shall contact the appropriate fire departments (Riverside County Fire Department, San Bernardino County Fire Department, Corona Fire Department, Chino Valley Independent Fire District, and Ontario Fire Department) for consultation during plan preparation and shall include fire safety measures recommended by these agencies. The plan shall list fire prevention procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations. The plan shall include, but not be limited to, the following: • SCE and/or its contractors shall have water tanks and/or water	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		trucks sited/available in the Project area for fire protection. • All construction vehicles shall have fire suppression equipment. • All construction workers shall receive training on the proper use of fire-fighting equipment and procedures to be followed in the event of a fire. • As construction may occur simultaneously at several locations, each construction site shall be equipped with fire extinguishers and fire-fighting equipment sufficient to extinguish small fires. • Construction personnel shall be required to park vehicles away from dry vegetation. • Prior to construction, SCE shall contact and coordinate with the appropriate fire departments to determine the appropriate amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks if water trucks are not used. SCE shall submit verification of its consultation with CAL FIRE and the local fire departments to the CPUC. • SCE shall submit the plan along with all records of consultation with local fire departments, including any responses received from fire departments, to CPUC staff for approval at least 30 days prior to commencement of construction activities shall be distributed to all construction crew members prior to construction of the Project.	
Impact 4.9-7: Operation could increase the probability of a wildfire.	Class III	None required.	Less than Significant
Impact 4.9-8: Induced currents associated with operation of the Project could generate electrical shocks.	Class II	**Mitigation Measure 4.9-8:** As part of the siting and construction process, SCE shall identify objects, such as fences, metal buildings, pipelines, etc. that are within the ROW that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with Cal/OSHA Electrical Safety Orders at 8 CCR 2739. The identification of objects shall be provided to the CPUC at least 30 days prior to the commencement of construction, and shall document the thresholds of electric field strength and metallic object size at which grounding becomes necessary.	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
10. Hydrology and Water Quality			
Impact 4.10-1: The Project would discharge stormwater and groundwater in compliance with water quality standards.	Class III	None required.	Less than Significant
Impact 4.10-2: The Project would result in discharge and use of groundwater.	Class III	None required.	Less than Significant
Impact 4.10-3: The Project would temporarily alter drainage patterns, including in the Santa Ana River, and would permanently alter drainage patterns in the vicinity of new access roads, improved access roads, and the Circle City Substation.	Class III	None required.	Less than Significant
Impact 4.10-4: The Project would alter existing drainage patterns in the vicinity of new access roads, improved access roads, and the Circle City Substation, which could result in flooding.	Class III	None required.	Less than Significant
Impact 4.10-5: The Project would place structures within the 100-year flood hazard area.	Class III	None required.	Less than Significant
Impact 4.10-6: The Project could expose construction workers to flooding in the event of dam failure.	Class III	None required.	Less than Significant
Impact 4.10-7: The Project could expose workers to potential mudflows in the case of dam failure.	Class III	None required.	Less than Significant
11. Land Use and Planning			
No Impact	No Impact	None required.	No Impact
12. Mineral Resources			
Impact 4.12-1: The Project would install structures within an area where significant mineral deposits have been mapped by the state.	Class III	None required.	Less than Significant
Impact 4.12-2: The Project could result in the loss of availability of a locally important mineral resource recovery site delineated on any local land use plans.	Class III	None required.	Less than Significant

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
13. Noise			
Impact 4.13-1: Operation and maintenance-related noise levels would contribute to ambient noise levels.	Class III	None required.	Less than Significant
Impact 4.13-2: Construction of the Project would cause a substantial temporary increase in ambient noise levels at sensitive receptor locations.	Class I	**Mitigation Measure 4.13-2a:** SCE and/or its contractors shall develop a Construction Noise Reduction Plan. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities. The Plan shall include, but not be limited to, the following measures for daytime construction activities: • Distribute to the potentially affected residences within 100 feet of Project construction a "hotline" telephone number, which shall be attended during active construction working hours, for use by the public to register complaints. All complaints shall be logged noting date, time, complainants' name, nature of complaint, and any corrective action taken. • All construction equipment must be properly tuned, in good condition, and shall have noise reduction features (e.g., mufflers and engine shrouds) no less effective than those originally installed by the manufacturers thereof. • Ensure that during construction, trucks and equipment are running only when necessary. • Maintain maximize physical separation, as far as practicable, between noise sources (construction equipment) and sensitive noise receptors. Separation may be achieved locating stationary equipment to minimize noise impacts on the community. • Use construction noise barriers such as paneled noise shields, barriers, or enclosures adjacent to noisy stationary equipment. Noise control shields shall be made featuring a solid panel and a weather-protected, sound-absorptive material on the construction-activity side of the noise shield. **Mitigation Measure 4.13-2b:** SCE and/or its contractors shall develop a Nighttime Noise and Nuisance Reduction Strategy plan in the event that nighttime construction activity is determined to be necessary within 400 feet of sensitive receptors. The plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities. The strategy shall include a set of site-specific noise attenuation measures that apply state-of-the-art noise reduction technology to ensure that nighttime construction noise levels and associated nuisances are reduced to the extent feasible.	Significant and unavoidable

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		The attenuation measures may include, but not be limited to, the control strategies and methods for implementation that are listed below. If any of the following strategies are determined by SCE to not be feasible, an explanation as to why the specific strategy is not feasible shall be included in the plan. • Plan construction activities to minimize the amount of nighttime construction. • Offer temporary relocation of residents within 200 feet of nighttime construction activities. • Temporary noise barriers, such as shields and blankets, shall be installed immediately adjacent to all nighttime stationary noise sources (e.g., auger rigs, generators, compressors, etc.). • Install temporary noise barriers that block the line of sight between nighttime activities and the closest residences within 400 feet. • The notification requirements identified in Mitigation Measure 4.13-2a shall be extended to include residences within 400 feet of pending nighttime construction activities.	
14. Population and Housing			
Impact 4.14-1: Construction could indirectly induce population growth.	Class III	None required.	Less than Significant
15. Public Services			
No Impact	No Impact	None required.	No Impact
16. Recreation			
Impact 4.16-1: Construction and operation of the Project would increase the use of existing parks and recreational facilities.	Class III	None required.	Less than Significant

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
17. Transportation/Traffic			
Impact 4.17-1: Construction could adversely affect traffic and transportation conditions.	Class II	**Mitigation Measure 4.17-1:** SCE shall prepare and implement a Traffic Management Plan subject to approval of Caltrans and/or the applicable local government(s), including agencies that operate alternative modes of transportation (e.g., North Main Corona Metrolink Station, the Corona Cruiser/RTA bus route, and the Metrolink Rail path). The approved Traffic Management Plan and documentation of agency approvals shall be submitted to the CPUC prior to the commencement of construction activities. At a minimum, the plan shall: • Include a discussion of work hours, haul routes, and work area delineation within public road rights-of-way. Heavy-duty construction vehicles and equipment would not utilize SR 91 within the City of Corona (from the Green River Road exit to the Pierce Street exit) to access the proposed Circle City Substation site during peak traffic hours throughout the approximately 9-week-long grading period at the substation site. On weekdays between 7:00 a.m. and 9:00 a.m., heavy-duty construction vehicles and equipment would not utilize SR 91 heading west, and would not utilize SR 91 heading east between 4:00 p.m. and 6:00 p.m. Alternate travel routes, such as East 6th Street or Magnolia Avenue, would be used instead during these times to avoid peak traffic hours along SR 91; • Require construction work to utilize traffic control and flagging when construction vehicles are present; • Provide access and parking restrictions through posted signage; • Require workers to park personal vehicles at the approved staging area and take only necessary project vehicles to the work sites; • Lay out plans for notifications and a process for communication with adjacent residents and landowners prior to the start of construction. Advance public notification shall include posting of notices and appropriate signage of construction activities. The written notification shall include the construction schedule, the exact location and duration of activities within each street (i.e., which road/lanes and access point/driveways would be blocked on which days and for how long), and a toll-free telephone number for receiving questions or complaints; and • Include plans to coordinate all construction activities with emergency service providers in the area prior to construction to ensure that construction activities and associated lane closures	Less than Significant with Mitigation

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
		would not significantly affect emergency response vehicles. Emergency service providers shall be notified of the timing, location, and duration of construction activities. SCE shall submit verification of its consultation with emergency service providers to the CPUC. All roads shall remain passable to emergency service vehicles at all times. • Identify all roadway locations where special construction techniques (e.g., night construction) would be used to minimize impacts to traffic flow. • Repair roads damaged by Project construction to a structural condition equal to that which existed prior to construction activity. The SCE and the local jurisdiction(s) shall enter into an agreement prior to construction that will detail the pre-construction conditions and the post-construction requirements of the rehabilitation program. • Lane closures shall occur during off-peak traffic hours (i.e., 9:00 a.m. to 4:00 p.m. and 6:00 p.m. to 7:00 a.m.).	
Impact 4.17-2: Project operation and maintenance could adversely affect traffic and transportation conditions.	Class III	None required.	Less than Significant
Impact 4.17-3: Operation and maintenance could cause conflict with level-of-service standards.	Class III	None required.	Less than Significant
Impact 4.17-4: Changes in air traffic patterns and increased air traffic levels could result in safety risks.	Class II	Implement Mitigation Measure 4.9-4.	Less than Significant with Mitigation
Impact 4.17-5: Traffic safety hazards could increase for vehicles, bicyclists, and pedestrians on public roadways.	Class II	Implement Mitigation Measure 4.17-1.	Less than Significant with Mitigation
Impact 4.17-6: Construction activities could result in delays for emergency vehicles on roadways in the area.	Class II	Implement Mitigation Measure 4.17-1.	Less than Significant with Mitigation
Impact 4.17-7: Alternative modes of transportation (public transit, bicycle or pedestrian) could be adversely affected during construction.	Class II	Implement Mitigation Measure 4.17-1.	Less than Significant with Mitigation
18. Utilities and Service Systems			
Impact 4.18-1: The Project would result in wastewater that would need to be treated per the requirements of the Santa Ana Regional Water Quality Control Board (RWQCB).	Class III	None required.	Less than Significant

TABLE ES-1 (Continued)
SUMMARY OF IMPACTS OF AND MITIGATION MEASURES FOR THE PROJECT

Impact	Impact Class	Mitigation Measure(s)	Residual Impact
Impact 4.18-2: The Project would require the construction of new storm water drainage facilities, or expansion of existing facilities.	Class III	None required.	Less than Significant
Impact 4.18-3: The Project would require the use of municipal water supplies but would not require new or expanded water supply resources or entitlements.	Class III	None required.	Less than Significant
Impact 4.18-4: The Project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	Class III	None required.	Less than Significant